

REMARKS

Claims 1-2, 4-11, and 13-15 are pending in the application. Claims 1 and 9 have been amended to more particularly point out and distinctly claim the invention. Claims 3 and 12 have been cancelled. Claims 5-8, 10 and 13-15 have been allowed. The applicant respectfully requests reconsideration of claims 1-2, 4, 9, and 11-12 in view of the following remarks.

Claims 1, 3, 4, 9, and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,288,795 to Urasawa (“Urasawa”) in view of Wilson et al., “HVS ColorGIF 2.0 User Manual” (“Wilson”). Claims 2 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Urasawa in view of Wilson as applied to claims 1 and 9 above further in view of Foley et al, “Computer Graphics: Principles and Practice” (“Foley”). Claim 1 has been amended to incorporate the limitation of claim 3. The applicant respectfully traverses the Examiner’s rejection of claim 1, as amended, for the reasons noted below.

Claim 1 recites a method for generating an output image from a source image, comprising “receiving a dithering mask corresponding to the source image . . . contain[ing] a plurality of dithering levels specifying, *on a per pixel basis*, the degree to which colors in corresponding regions of the source image can be variably dithered.” The Examiner admits that Urasawa fails to disclose “a dithering mask . . . containing a plurality of dithering levels specifying, *on a per pixel basis*, the degree to which colors in corresponding regions of the source image can be variably dithered,” as recited in claim 1. To supply this missing limitation, the Examiner relies on the Wilson reference, and argues that the Wilson reference discloses a variable dithering mask in its section on “Using Selections.” The applicant respectfully disagrees, and traverses the Examiners rejection for the reasons that follow.

In its “Using Selections” section, the Wilson reference teaches applying different dithering levels to the different objects or images contained within a complex or composite object or image. This is evident from the third paragraph of the “Using Selections” section, in which Wilson discloses that different dithering operations can be performed on different objects or images in a composite image or object having “a complex foreground image against a background of flat color.” To dither the banner’s foreground image while leaving its background

color alone, Wilson discloses “Using the Magic Wand tool, [to] *select the foreground image only.*” (See, *Using Selections*)(emphasis added). This is done by “click[ing] in the background and then [choosing] Invert Selection.” *Id.* In order to be able to “click in the background” and “invert” the selection, the foreground and background sections disclosed in Wilson’s section on “Using Selections” must be separately identifiable and selectable graphical images or objects.

Once the foreground image is selected, Wilson discloses “Select[ing] the Dithering Intensity . . . appropriate for the foreground” image. As Wilson earlier explains, the Dithering Intensity is a “parameter [that] allows you to set the amount of dithering used to represent *the image.*” (See, *Dithering*) (emphasis added). Thus, while each dithered image can be associated with its own dithering intensity parameter, that parameter specifies the dithering level that is applied to the entire image, rather than to portions of the image on a per pixel basis as recited in claim 1. Consequently, on the whole, Wilson’s description and instructions for “Using Selections” merely discloses applying different dithering levels to the different images or objects in a compound image or object. Significantly, Wilson fails to disclose or suggest applying “a dithering mask . . . contain[ing] a plurality of dithering levels specifying, *on a per pixel basis*, the degree to which colors in corresponding regions of the source image can be variably dithered,” as recited in claim 1.

Nor does Urasawa disclose this missing limitation. Urasawa discloses a fixed “dither pattern or dither matrix 4 of the conventional type known as a Bayer’s matrix.” Col. 2, ll. 63-66. The dither matrix “is a matrix of threshold values that are compared one-to-one with a block of continuous-tone pixels to generate a block of bi-level pixels.” Col. 1, ll. 15-17. “Pixels with values less than the corresponding threshold value in the dither matrix 4 become white pixels in the output image 6. Pixels with values equal to or greater than the corresponding threshold level in the dither matrix 4 become black pixels in the output image 6.” Col. 3, ll. 1-6. Thus, Urasawa’s dither matrix 4 is of a conventional type that is used to *generate* a black and white dither pattern, rather than to “specify[] . . . the degree to which colors in corresponding regions of the source image can be variably dithered,” or dithered by a variable amount, as recited in

claim 1. Consequently, claim 1 is patentable over the combination of the Wilson and Urasawa references for at least this reason.

Claim 9 is a Beauregard claim reciting a computer program product comprising instructions operable to perform the method recited in claim 1. Since claim 1 is patentable over the combination of Wilson and Urasawa as discussed above, claim 9 is patentable over that combination for at least the same reasons. Claims 2 and 4 depend from and contain all the limitations of claim 1, while claim 11 depends from and contains all the limitations of claim 9. Accordingly, claims 2, 4, and 11 are believed allowable over the combination of Wilson and Urasawa for at least the same reasons as claims 1 and 9, respectively.

All claims are believed to be in condition for allowance, which the applicant respectfully requests. No fee is believed due for this response. Please apply any applicable charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 3-15-2004



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